- 9. (canceled)
- 10. The device of claim 1, wherein the metal chalcogenide layer includes tin-selenide.
- 11. The device of claim 1, wherein a thickness of the metal chalcogenide layer is between 750 Å and 1250 Å.
- 12. The device of claim 1, wherein a thickness of the chalcogenide glass layer is between 250 Å and 35 Å.
 - 13. (canceled)
- 14. The device of claim 1, wherein an electrical resistance between the first electrode and the second electrode is programmable within the range of 10 k Ω and 1 M Ω .
- 15. The device of claim 1, wherein an electrical resistance between the first electrode and the second electrode is programmable within the range of 10 k Ω and 100 k Ω .
- **16**. A method of forming a variable resistance memory device, the method comprising:

forming a first electrode;

forming a buffer layer;

forming a chalcogenide glass layer by co-depositing a chalcogenide glass material and a metal material, wherein the buffer layer is formed between the first electrode and the chalcogenide glass layer and the buffer layer includes the chalcogenide glass material and excludes the metal material;

forming a second buffer layer, wherein the chalcogenide glass layer is formed between the buffer layer and the second buffer layer;

forming a metal chalcogenide layer, wherein the second buffer layer is formed between the chalcogenide glass layer and the metal chalcogenide layer;

- forming an ion source structure, wherein the metal chalcogenide layer is formed between the ion source structure and the second buffer layer; and
- forming a second electrode, wherein the ion source structure is formed between the second electrode and the metal chalcogenide layer.
- 17. The method of claim 16, wherein the metal material includes tin.
- 18. The method of claim 16, wherein the metal material further includes a metal selected from the group consisting of chromium, tungsten, and copper, cobalt, indium, and combinations thereof.
 - 19. (canceled)
- 20. The method of claim 16, wherein forming the ion source structure comprises:

forming a first adhesion layer;

forming a metal layer; and

forming a second adhesion layer.

- 21. The device of claim 1, wherein the second buffer layer includes the chalcogenide glass material and excludes the metal material.
- 22. The device of claim 21, wherein the chalcogenide glass material includes germanium selenide.
- 23. The device of claim 7, wherein the mobile metal layer includes silver and wherein the second buffer layer includes the chalcogenide glass material and excludes the metal material.
- **24**. The device of claim **23**, wherein the chalcogenide glass material includes germanium selenide.

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